

CLAIMS

1. A process of de-phosphatation of manure, said process comprising the steps of

- a) adding by-products of electrolysis and foundry (BPEF) to liquid manure;
- b) stirring the manure-containing BPEF;
- c) letting the manure-containing BPEF that was so stirred stand for a time sufficient for the manure to separate into a solid fraction and a liquid fraction, said solid fraction depositing in the manure pit; and
- d) separating the liquid and solid fractions,

wherein said liquid fraction contains less than 50% of total phosphorus initially contained in the manure, said phosphorus being found in the solid fraction.

2. The method of claim 1, wherein the BPEF is gradually added to the manure and said stirring is being made throughout the addition of BPEF.

3. The method of claim 1 or 2, wherein the step of stirring is maintained for a period of time after the addition of BPEF to ensure proper mixing.

4. The method of claim 1, 2 or 3, wherein said manure is left to settle for a period of at least one day after the stirring is finished for allowing deposition of the solid fraction containing phosphorus and solid particles.

5. The method of claim 1, 2 or 3, wherein said manure is left to settle for a period of at least seven (7) days after the stirring is finished for allowing deposition of the solid fraction containing phosphorus and solid particles.

6. The method of claim 1, 2, 3, 4 or 5, wherein said BPEF is added in an amount corresponding to at least 0.5 g Mg L⁻¹ of manure.

7. The method of claim 1, 2, 3, 4 or 5, wherein said BPEF is added in an amount corresponding to about 0.5 to 5.0 g Mg L⁻¹ of manure.
8. The method of claim 1, 2, 3, 4, 5, 6 or 7, wherein said BPEF is added in an amount corresponding to about 3.0 g Mg L⁻¹ of manure.
9. Use of a solid fraction obtained by the method of claim 1, 2, 3, 4, 5, 6, 7 or 8, as a fertilizer.
10. The use of claim 9, wherein the fertilizer is a slow-release organo-mineral fertilizer.